

## PROJECT DESCRIPTION

### GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW POINT CONTROL PERSON SIGNAL (FLAG IN THE AIR) AT MD 45 AND HEREFORD HIGH SCHOOL ENTRANCE IN BALTIMORE COUNTY. MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

### INTERSECTION OPERATION

#### 1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A FLASHING MODE.

#### 2. SPECIAL OPERATION

THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS A PUSHBUTTON IS ACTIVATED BY THE POINT CONTROL PERSON WHICH WILL STOP MD 45 APPROACHES.

### CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER AND INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP AND ASSOCIATED HARNESSSES HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.

### SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

## MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-30

STANDARD NO. MD-104.32-01 (INTERSECTION FLAGGING OPERATION)

STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)

STANDARD NO. MD-104.35-01 (LANE SHIFT)

STANDARD NO. MD-104.33-01 (SHOULDER WORK)

## PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. DAVE MALKOWSKI  
DISTRICT ENGINEER  
PHONE: (410) 321-3461

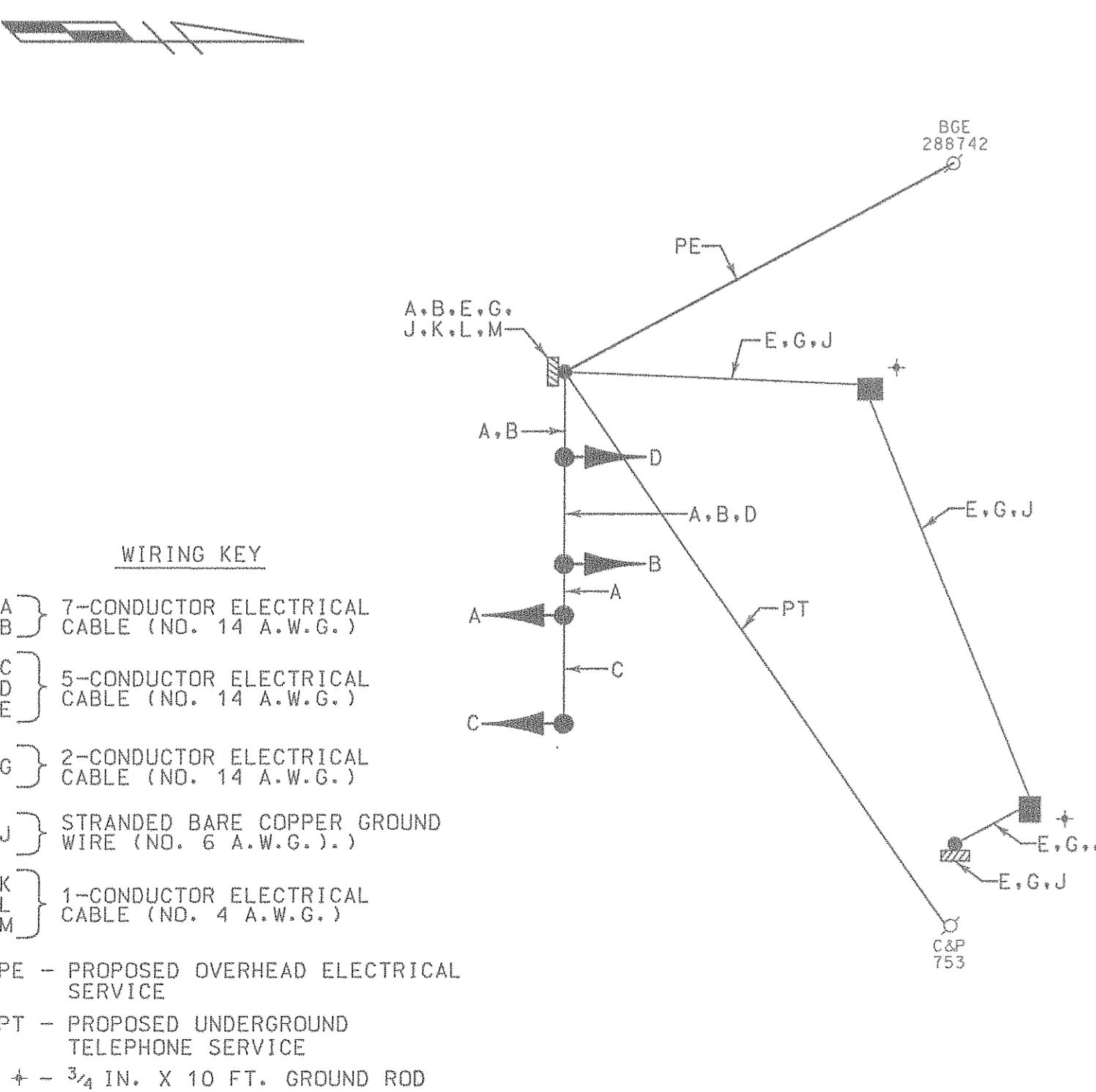
MR. JOSEPH MCMAHON  
DISTRICT UTILITIES ENGINEER  
PHONE: (410) 321-3456

MR. RANDALL SCOTT  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 321-3514

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

MR. DAVE RAMSEY  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 321-3468

## WIRING DIAGRAM



## EQUIPMENT LIST "A"

### A. EQUIPMENT TO BE SUPPLIED BY THE SHA

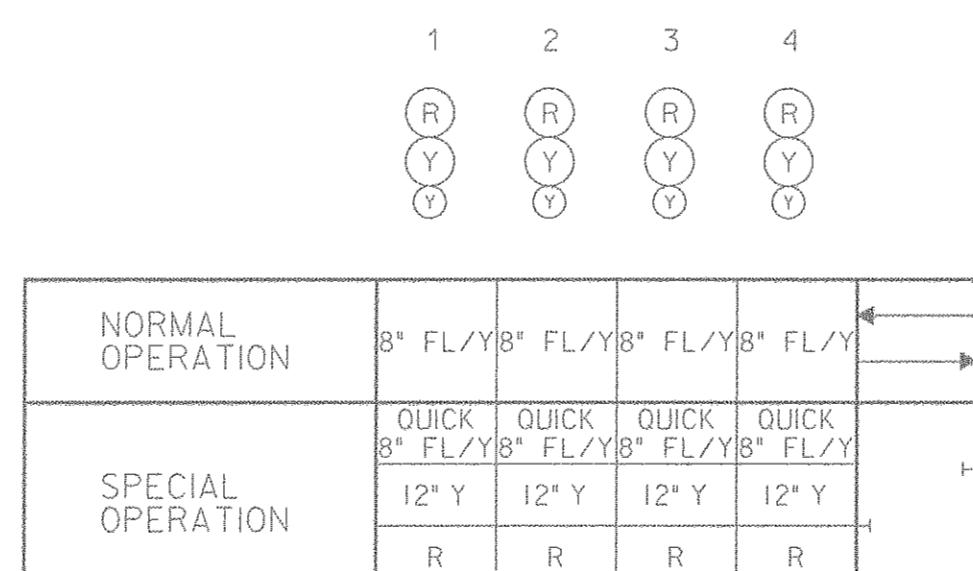
ITEM NO.	QUANTITY	DESCRIPTION
9080	1 EACH	EIGHT PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER AND INTERSECTION MONITOR WITH BATTERY BACK-UP HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.
9089	22 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH S1-1 MOD. SIGN (36 IN. X 42 IN.) - MAST ARM MOUNT.
9000	1 EACH	PUSHBUTTON AND SIGNAL INDICATION FOR POINT CONTROL PERSON IN AUXILIARY CABINET
9000	1 EACH	23 FT. STEEL TWIN MAST ARM POLE WITH A 56 FT. MAST ARM

## EQUIPMENT LIST "B"

### B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTAINCE OF TRAFFIC PER ASSIGNMENT
2001	2 C.Y.	TEST PIT EXCAVATION
5004	50 L.F.	24 INCH WHITE THERMOPLASTIC PAVEMENT MARKING TAPE
8001	6 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8003	1 EACH	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE
8019	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT
8024	50 L.F.	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - TRENCHED
8026	80 L.F.	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - BORED
8027	80 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - TRENCHED
8032	75 L.F.	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - BORED
8033	2 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	2 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8042	120 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
8043	190 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8045	150 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8048	150 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8049	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G. - THHN/THWN
8053	22 S.F.	INSTALL OVERHEAD SIGN
8066	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
8074	1 EACH	INSTALL STEEL POLE AND SINGLE MAST ARM
8084	12 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
NEG.	1 EACH	FURNISH AND INSTALL AUXILIARY CABINET (14.38 IN. (H) X 10.38 IN. (W) X 7 IN. (D))

## PHASE CHART



### NOTE:

AUXILIARY CABINET SHALL BE A NEMA 3R-4X SMALL SINGLE DOOR ENCLOSURE WITH A LOCK NOT OPENED BY A STANDARD NO. 2 KEY. CONTRACTOR SHALL DELIVER AUXILIARY CABINET TO SHA SIGNAL SHOP FOR MODIFICATION PRIOR TO INSTALLING.

**VMR&A**  
Whitman, Requardt  
and Associates, LLP  
2315 Saint Paul Street  
Baltimore, Maryland 21218  
(410) 235-3450

REVISIONS	APPROVALS
ASST. TRAFFIC ENGINEERING DESIGN DIVISION	
ASST. DISTRICT ENGINEER, TRAFFIC	
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	
DRAWN BY: S.BLOSS F.A.P. NO. 2919 CHECKED BY: N.LEARY F.S.H.A. NO. BA358AS1B51 SCALE: NONE COUNTY: BALTIMORE DATE: 7-2-99 LOG MILE: 2 OF 2	

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION SHEET  
MD 45 AND HEREFORD HIGH SCHOOL ENT.